Conservation Practice Standard
Nutrient Management
(Code PA590)

JOB SHEET

Reportable in Acres

Prepared For

Operator's Name

Operator's Address

Operator's Telephone Number

Reviewed and Approved By

Name

Nutrient Management Specialist's Program Certification Number,

CCA Number or

NRCS Field Team Number

Date of Plan Submission

Nutrient Management 590 Plan Agreement & Responsibilities

Plan Implementation Requirements

This nutrient management plan has been developed to meet the requirements of the NRCS (Natural Resources Conservation Service) 590 Nutrient Management Standard.

This nutrient management (590) plan is required to be implemented as approved in order to maintain compliance with the nutrient management (590) conservation standard in your conservation plan. Implementation includes adherence to manure and fertilizer application rates, timing, setbacks and conditions; and record keeping.

Records required to be maintained include the following:

1) Annual crop yields
2) Manure and fertilizer application rates, locations and date of application
3) Soil test reports (testing required every 3 years per crop management unit)
4) Manure test reports (testing required once a year for each manure group)
5) Number of animals on pasture, number of days on pasture, and hours per day on pasture

Plan Writer Signature

The information contained in this plan is accurate to the best of my knowledge. This plan has been developed in accordance with the criteria established for nutrient management (590) conservation practice standard.

Specialist Signature _____

Date _____

Operator Agreement

All the information I provided in this nutrient management plan is accurate to the best of my knowledge and I will implement the practices and procedures outlined in the nutrient management plan in order to protect water quality and address the nutrient needs of the crops associated with the operation. If I use a commercial hauler or broker, that hauler/broker will be certified.

Operator's Signature _____

Operator's Title _____

Date _____

Nutrient Management Plan

Crop Year _____

CMU/ Field ID	Acres	Planned Crop	Manure Group	Application Season	Incorp.	Planned Manure Rate	Starter Fertilizer (lb/A)			Supplemental Fertilizer (lb/A)			Nutrient Balance (lb/A) [1]			Notes
							N	P_2O_5	K_2O	N	P_2O_5	K_2O	N	P_2O_5	K_2O	

[1] Positive numbers = nutrient deficit; negative numbers = nutrient excess

Winter Manure Spreading Procedures

List the crop management units where winter application is either planned or restricted, the manure application procedures to be used including application setbacks, the ground cover and conditions of the field during application, and the type of manure planned to be applied.

Operation Information

Operation Description (acreage of cropland, hayland and pastureland; crop rotation, description of each manure group)

County(s)

Nutrient impaired waters, i.e. 303(d).
In areas with identified or designated nutrient related water quality impairment, the PA Phosphorus Index shall be completed to determine the potential for nutrient transport from each CMU.

Operation Acres

Total Acres

Total Acres Available For Nutrient Application Under Operator's Control

Owned

Rented

Names & Addresses of Owners of Rented or Leased Land

Manure Application Equipment Capacity & Practical Application Rates
(Description of application equipment, practical application rates based on calibration and calibration method used, the data recorded during equipment calibration is to be retained on the farm)

Operation Maps

Operation maps required identifying the land included in the plan. Maps or aerial photographs must clearly identify: operation boundaries, field identification, acreage and boundaries, soil types and slopes with soil legend, manure application setback areas and buffers and associated landscape features, location of existing and proposed structural nutrient management related BMPs (including manure storage facilities road names adjacent to or within the operation).

Manure Analysis Results Summary

Note: Operator may choose to attach copies of the manure analysis reports in place of this table.

Manure Group	Lab	Date Sampled	Total Nitrogen (N)	Ammonium N (NH_4-N)	Total Phosphate (P_2O_5)	Total Potash (K_2O)	Percent Solids	Notes
			Note lb/ton or lb/1000 gal					

Soil Test Results Summary

Note: Operator may choose to attach copies of the soil test reports in place of this table.

CMU/Field ID	Lab	Date Sampled	Soil Test Levels			Soil Test Report Levels [1] (If not in ppm)	
			pH	ppm Mehlich-3 P	ppm K	Phosphorus (lbs P or lbs P_2O_5)	Potassium (lbs K or lbs K_2O)

[1] Complete only if laboratory did not report phosphorus and potassium levels in ppm. Indicate units used on the soil test report.

Nutrient Application Calculations

I. Field Information and P Index Part A

Crop Year: _____

CMU/ Field ID	Acres	Crop	Planned Yield	P-Index Part A			Planning Consideration Notes
				Is the CMU in a Special Protection Watershed?			
				Is there a significant farm management change as defined by Act 38?			
				Is the Soil Test Mehlich-3 P greater than 200 ppm P?			
				Is the Contributing Distance from this CMU to receiving water less than 150 ft.?			
				Soil Test P Mehlich-3 ppm	**Did you answer yes to any of the questions above** (Yes or No)	**P Index Part B** (N-Based or Part B)	

II. Determining Other Nutrient Contributions

Crop Year: _____

CMU/ Field ID	Soil Test Recommendation			Other Fertilizer [1]			Manure History Description [2]	Residual Manure N [3]	Legume History Description	Residual Legume N [4]
	lb N/A	lb P_2O_5/A	lb K_2O/A	lb N/A	lb P_2O_5 /A	lb K_2O/A		lb N/A		lb N/A

[1] Fertilizer applied regardless of manure application.
[2] Manure and all other organic sources of nitrogen.
[3] Agronomy Guide Table 1.2-14B or Table 1.2-15 (include calculations in Appendix 11)
[4] Agronomy Guide Table 1.2-8 or Soil Test Report

III. Calculating N-Balanced Manure Rate

Crop Year: _____

CMU/ Field ID	Net Nutrients Required			Manure Group	Application Season	Incorporation	Incorp. Factor	Avail. N	N Balanced Manure Rate
	lb N/A	lb P_2O_5 /A	lb K_2O/A					lb/ton or lb/1000gal	ton or gal/A

IV. Calculating P-Based Manure Rate for Fields Requiring Part B of the P Index

Crop Year: _____

CMU/ Field ID	Proposed[1] Manure Rate for P Index Part B Evaluation	Proposed Rate P Applied (Entered in P Index[2])	Yield	P Removal/ Unit of Yield	Crop Removal P	Starter P Applied	Net P for P Removal Manure Rate	Net P Removal Manure Rate[3]	P Manure Rate for PI<80[4]	Planned P Rate[5]	P Applied at Planned P Rate[6]
	ton or gal/A	lb P_2O_5 /A	bu or ton/A	lb P_2O_5	lb P_2O_5 /A	lb P_2O_5 /A	lb P_2O_5 /A	ton or gal/A	ton or gal/A	ton or gal/A	lb P_2O_5 /A

[1] This would be the preferred Planned Manure Rate if there are no P Index restrictions. The P applied at this rate must be entered into the P Index to determine if it is acceptable P management.

[2] If this rate of P is acceptable in the P Index, go directly to worksheet V and enter the proposed rate as the "Planned Manure Rate" and continue, no further calculations are required on this worksheet.

[3] P Balanced Manure Rate to meet the Net P Removal amount. Required for P Index 80-99.

[4] This is a rate that is greater than P Removal but less than the N Balanced Rate that would result in a P Index <80. Optional

[5] Choose a rate less than or equal to the net P Removal or P Index <80 columns. This is transferred to the Planned rate column on Worksheet V.

[6] For P Index 80-99 this must be less than the Net P for P Removal Manure Rate column.

V. Nutrients Applied in Manure and Balance

Crop Year: _____

CMU/ Field ID	Planned Manure Rate[1]	Manure Utilized on This CMU	Planned Rate Basis[2] N or P	P Index Value if Part B[3] Required	Manure Nutrients Applied at Planned Rate			Nutrient Balance After Manure at Planned Rate		
	ton or gal/A	ton or gal			lb N/A	lb P_2O_5/A	lb K_2O/A	lb N/A	lb P_2O_5/A	lb K_2O/A

[1] Use the P calculation sheet (IV) to calculate a P based rate if the field is P restricted by the P Index (>80). Provide documentation for irrigated manure or rates greater than 9000 gal/acre.

[2] Indicate whether the Planned Rate is based on N (P Index Part A only or P Index Part B<80) or if it is restricted by P Index Part B.

[3] For all fields that require Part B of the P Index, enter the final P Index Value for the Planned Manure Rate here.

VI. Supplemental Fertilizer and Final Nutrient Balance

Crop Year: _____

CMU/ Field ID	Supplemental Fertilizer			Final Nutrient Balance			Notes
	lb N/A	lb P_2O_5/A	lb K_2O/A	lb N/A	lb P_2O_5/A	lb K_2O/A	

Appendix 7

Phosphorus Index

The current Pennsylvania Phosphorus Index Spreadsheet or paper worksheet for each field that required Part B of the P Index (Appendix 6 Section 1) must be included here. Preliminary P Index calculations that you might make to decide on an appropriate management strategy should not be included here.

Supporting Information & Documentation

Attach information and documentation necessary to support plan content not included elsewhere in the plan or appendices. Examples include, but are not limited to, calculations for irrigation rates, or calculations for manure residual N if using Table 1.2-15.